

We claim:

1. A catalyst for the synthesis of methyl mercaptan, obtainable from aluminum oxide, an alkali metal tungstate and at least one ammonium salt and/or at least one protic acid selected from the group consisting of sulfuric acid, phosphoric acid, sulfurous acid, tungstic acid, phosphorous acid, hypophosphorous acid, hydrogen fluoride, hydrogen bromide and hydrogen iodide.
2. The catalyst according to claim 1 which is obtainable from aluminum oxide, an alkali metal tungstate and at least one ammonium salt.
3. The catalyst according to claim 1 or 2, wherein the alkali metal tungstate used is a potassium tungstate.
4. The catalyst according to claim 1 or 2, wherein ammonium salts used are sulfates, phosphates, sulfides, tungstates, molybdates, sulfites, peroxodisulfates, phosphites and hypophosphites.
5. The catalyst according to claim 1 or 2, wherein ammonium salts used are sulfur- or phosphorus-comprising salts or tungstate salts.
6. The catalyst according to claim 1 or 2, wherein alkali metal tungstates are applied in an amount of from 10 to 16% by weight, based on the total mass of the catalyst.
7. The catalyst according to claim 1 or 2, wherein ammonium salts are applied in an amount of from 0.01 to 15% by weight, based on the total mass of the catalyst.
8. The catalyst according to claim 1 or 2 which has a pH of less than 9.8.
9. The catalyst according to claim 1 or 2 which has a pH in the range from 5 to 9.7.
10. A process for preparing methyl mercaptan by reacting methanol with hydrogen sulfide, wherein a catalyst according to any of claims 1 to 9 is used.
11. The process according to claim 10, wherein hydrogen sulfide and methanol are used in a molar ratio of from 1 : 1 to 2 : 1 in the preparation of methyl mercaptan.